SAFETY DATA SHEET

Section 1: Chemical Product and Company Information

1.1 Product Identifier
Product Name: CaviCide

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against
Product Use: Hard surface cleaner and disinfectant.

1.3 Details of the Supplier of the Substance or Mixture
Manufacturer: METREX RESEARCH
28210 Wick Rd
Romulus, MI 48174
U.S.A.

1.4 Emergency Telephone Number (Chemical Spills, Leaks, Fire, Exposure or Accident only):
CHEMTREC: 1-800-424-9300 (in the US) 1-703-527-3887 (Outside the US)

Information Phone Number: 1-800-841-1428 (Customer Service)
SDS Date Of Preparation/Revision: December 15, 2014

P261 Avoid breathing vapors.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear eye protection.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312: Call a POISON CENTER or physician if you feel unwell.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do continue rinsing.
P337+P313 If eye irritation persists get medical attention.
P370+P378 In case of fire: Use water spray or fog, alcohol-resistant foam, carbon dioxide or dry chemical to extinguish.
P403+P235 Store in a well-ventilated place. Keep cool.
P501

Ingestion: If swallowed, get medical advice by calling a Poison Control Center or hospital emergency room. If advice is not available, take victim and product container to the nearest emergency treatment center or hospital. Do not attempt to give anything by mouth to an unconscious person.

4.2 Most Important symptoms and effects, both acute and delayed: Causes serious eye irritation. Inhalation of concentrated vapors may cause irritation of the eyes, nose and throat and dizziness and drowsiness.

4.3 Indication of any immediate medical attention and special treatment needed: Immediate medical attention is generally not required.

Section 5. Fire Fighting Measures

5.1 Extinguishing Media: Use water spray or fog, alcohol-resistant foam, carbon dioxide or dry chemical. Cool fire exposed containers with water.

5.2 Special Hazards Arising from the Substance or Mixture: Flammable liquid and vapor. May form explosive mixtures in air at temperatures at or above the flashpoint. Flammable vapors may collect in confined areas. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flashback. Fire exposed containers may rupture explosively.

5.3 Advice for Fire-Fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

Section 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate protective clothing and equipment.

6.2 Environmental Precautions: Avoid release to the environment

6.3 Methods and Material for Containment and Cleaning Up: Eliminate all ignition sources. Ventilate area. Use explosion-proof equipment if large amounts are released. Stop leak if it is safe to do so and move containers from the spill area. Collect material with an inert absorbent material and place in appropriate, labeled container for disposal.

Section 7. Handling and Storage

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Empty containers retain product residues and may be hazardous. Do not flame cut, drill, weld, etc. on or near empty containers, even empty.

7.3 **Specific end use(s):** Hard surface cleaner and disinfectant.

Section 8. Exposure Controls / Personal Protection

8.1 Control Parameters:

Chemical	Korean Exposure Limit
Isopropanol	200 ppm 8 hr Exposure Limit 400 ppm Short Term Exposure
Ethylene Glycol Monobutyl Ether (2-Butoxyethanol)	20 ppm 8 hr Exposure Limit
Diisobutylphenoxyethoxyethyldimethyl benzylammonium chloride	None Established

Section 9. Physical and Chemical Properties

9.1 Information on basic Physical and Chemical Properties:

Appearance	Clear liquid.	Vapor Pressure	43.3 mmHg @ 20°C (isopropanol)
Odor	Alcohol	Vapor Density:	2.1 (isopropanol)
Odor Threshold	0.001 ppm (ethylene glycol monobutyl ether)	Relative Density /Specific Gravity:	0.972
pH	11.0-12.49	Solubility in Water:	Complete
Melting/Freezing Point	Not determined	Partition Coefficient (n-octanol/water	Not determined
Boiling Point: Flash Point:	Not determined 28.3°C (83°F)	Auto-ignition Temperature	Not determined

Section 12. Ecological Information

12.1 Toxicity:
Isopropanol: LC50 fathead minnows 11,130 mg/L/48 hr; LC50 brown shrimp 1400 mg/L/48 hr Diisobutylphenoxyethoxyethyldimethylbenzylammonium chloride**:** LC50 pimephales promelas 1.6 mg/L/96 hr, LC50 lepomis macrochirus 1.4 mg/L/96 hr.

12.2 Persistence and degradability: Isopropanol and 2-butoxyethanol are readily biodegradable in screening tests. Diisobutylphenoxyethoxyethyldimethylbenzylammonium chloride is not readily biodegradable.

H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Effective Date: 12/15/14

Supersedes Date: New SDS

Revision Summary: New SDS

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